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Qualitative Testing and Approval of New Materials used in the Fabrication of 500 kW Wind Mill Blade

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Abstract: This report describes the qualitative tests carried out to qualify the raw materials used in the fabrication of 500 kW wind turbine blade. The raw materials used for the fabrication of wind mill blades were characterized thoroughly using in-house equipments. Resin system characterization, casting property evaluation, fabric property evaluation and test laminates properties were evaluated. It is found that the results obtained from various tests as detailed above meet the required specifications for fabrication of the component.